

REMARKS/ARGUMENTS

Claims 14-17 and 26-46 are pending in the present application and stand rejected. Claims 14-17, 26-33, and 35-46 are rejected under 35 U.S.C. §102(b) as being anticipated by Luc Neumann & Alberto Barbosa-Raposo, *An Approach for an adaptive Visualization in a Mobile Environment*. Spring-Verlag, London (1997) (hereinafter “Neumann”). Claim 34 is rejected under 35 U.S.C. §103(a) as being unpatentable over Neumann in view of *Using Oracle Jdeveloper and Business Components for Java with Oracle interMedia*. (Feb. 2001) (hereinafter “Oracle”). Claims 14, 26, and 37 have been amended according to the specification. Support for the claim amendments can be found throughout the application and, among other places, at pages 10-11 and as illustrated in Figs. 9, 11, and 12. No new matter has been added.

**Rejections under Section 102**

Claim 14

Claim 14 recites a rendering method comprising “receiving at a rendering service a rendering request from a user site...the rendering request comprising identifiers of rendering resources currently available at the user site...comparing identifiers of the rendering resources in the resource pool at the rendering service with the identifiers of rendering resources currently available at the user site; selectively uploading rendering resources from the user site to the rendering service based on a result of said comparing step; and storing the selectively uploaded rendering resources in the resource pool for use in processing additional rendering requests received from the user site.” Applicants respectfully submit that Neumman does not disclose a rendering method with at least these features.

Neumman describes an approach to dividing tasks between a mobile client and a server based upon the restrictions encountered in a mobile environment such as narrow bandwidth and limited client resources. See, Neumann at pages 2-3. In this approach, the client sends a URL to an application server identifying the location of an existing VRML world. See, Neumann at page 9 (Fig. 6, Arrow 1). The application server reads and parses the VRML file from the specified location. (Fig. 6, Arrow 2). The application server then sends a small scene

graph document representing the elements of the VRML world to the client. (Fig. 6, Arrow 3). The client selects desired elements from the scene graph document and sends a new document to the application server describing the selected elements. (Fig. 6, Arrow 4). The application server then creates a sub-VRML world with only the selected elements from the original VRML world. (Fig. 6, Arrow 5) See, Neumann at page 9 (“Using this new document, the application server can create a new VRML 2.0 world from the original one, by extracting only the desired parts of it.”).

The client in Neumann does not provide rendering resources to the application server. Instead, the client supplies the location of an existing VRML world and then selects a subset of the VRML elements contained within the specified VRML world. In other words, the client simply filters the existing VRML world according to a user preference and the application server creates a “sub-VRML” world that includes only the selected elements. See, Neumann at page 8 (“...we developed an application capable of selecting the elements (i.e., geometric objects, light sources, and cameras) of a remote VRML 2.0 world [9]. This application uses the data reduction technique to filter the data to be rendered. By presenting only the elements selected, the utilization of resources is reduced and the visualization can be done more efficiently.”) This filtering approach differs from the claim language in several respects.

First, Neumann does not disclose “the rendering request comprising *identifiers of rendering resources currently available at the user site.*” As indicated above, the client request simply specifies a subset of VRML elements that are already available at the application server -- it does not comprise identifiers of rendering resources currently available at the client. For the same reason, Neumann does not disclose “comparing identifiers of the rendering resources in the resource pool at the rendering service with the identifiers of rendering resources *currently available at the user site*” because the rendering resources at the application server are the only set of rendering resources involved in this process. Neumann does not disclose that a separate set of resources is maintained by the client.

Second, Neumann does not disclose “selectively uploading rendering resources from the user site to the rendering service based on a result of said comparing step; and storing the selectively uploaded rendering resources in the resource pool for use in processing additional

rendering requests received from the user site." There is no teaching or suggestion that VRML worlds (or elements thereof) are selectively uploaded from the client based upon the result of a comparison performed at the application server. In addition, there is no teaching or suggestion that such resources are stored at the application server for use in processing additional rendering requests received from the same client. Put simply, as fully recited above, Neumann does not disclose that (1) a client makes a request that includes identifiers (2) a server performs a comparison involving these identifiers, and (3) a client uploads rendering resources to the server based upon the results of the comparison.

By contrast, the technique of comparing resources at the rendering service with resources at the user site and selectively uploading resources from the user site to the rendering service is described throughout the present application. See e.g., p. 10, line 16 - p. 11, line 3; Figs. 9, 11, 12. Therefore, based upon a carefully reading of the reference, Applicant respectfully submits that Neumann does not anticipate claim 14 because it fails to disclose each and every claim element.

#### Claims 15-17

Claims 15-17 depend from claim 14 and incorporate all of its limitations. Accordingly, these claims are believed allowable over Neumann for at least the reason that they depend from an allowable base claim. In addition, claim 15 recites "uploading a given required resource from the user site to the rendering service only if the comparing step determines there is not a match between the resource pool and the user site for that required resource" and this additional limitation is not found in Neumann. Accordingly, reconsideration and allowances of claims 14-17 is requested.

#### Claim 26

Claim 26 includes limitations similar to recited in claim 1 and is believed allowable over Neumann for at least the reasons previously discussed. Specifically, claim 26 recites "if a required rendering resource is not already stored in a data store local to the rendering server computer system, then uploading that required rendering resource from the user site, wherein if a required rendering resource is already stored in the local data store, then obtaining

that required rendering resource from the local data store.” Neumann does not disclose uploading a required rendering resource from the uscr site to the rendering server computer system if the resource is not found in a data store at the render server computer.

Claims 27-33, 35-36

Claims 27-33 and 35-36 depend from claim 26 and incorporate all of its limitations. These claims are therefore believed allowable over Neumann for at least the reason that they depend from an allowable base claim. In addition, claim 29 recites “wherein if the first required rendering resource has been uploaded from the user site during servicing of a previous rendering request, then obtaining a previously generated rendering resource from the local data store thereby producing the generated rendering resource” and this additional limitation is not found in the cited reference. Neumann does not contemplate uploading rendering resources from the user site or using previously generated rendering resources as claimed. Accordingly, reconsideration and allowances of claims 26-33 and 35-36 is respectfully requested.

Claim 37

Claim 37 includes limitations similar to those discussed in connection with claim 26 and is believed allowable over Neumann for at least the reasons previously identified. Specifically, claim 37 recites “the server device further configured to request a required rendering resource from the user site if the required rendering resource is not already stored in a data store local to the server device and to upload the required rendering resource from the user site to the local data store” and this limitation is not disclosed in the cited reference as previously discussed.

Claims 38-41

Claims 38-41 depend from claim 37 and incorporate all of its limitations. These claims are therefore believed allowable over Neumann for at least the reason that they depend from an allowable base claim. In addition, claim 39 recites “the resource pool comprising identities of one or more rendering resources that have been uploaded from the user site, the server device further configured to determine whether to upload a required rendering resource

based on information contained in the resource pool” and this additional limitation is not found in the cited reference. Accordingly, reconsideration and allowances of claims 38-41 is respectfully requested.

Claim 42

Claim 42 includes limitations similar to those previously discussed and is believed allowable over Neumann for at least the reasons previously identified. Specifically, claim 42 recites a computer program product with computer program code to “control the data processor to upload a required rendering resource from the user site if the required rendering resource is not already stored in the local data store and to store the uploaded rendering resource in the local data store.” Neumann does not disclose uploading a required rendering resource from the user site if it is not already available in a local data store.

Claims 43-46

Claims 43-46 depend from claim 42 and incorporate all of its limitations. These claims are therefore believed allowable over Neumann for at least the reason that they depend from an allowable base claim. In addition, claim 46 recites “if a required rendering resource is already stored in the local data store, then a generated rendering resource that corresponds to that required rendering resource is obtained from the local data store” and this additional limitation is not found in the cited reference. Neumann does not disclose that a generated rendering resource corresponding to a required rendering resource is already found in a data store. Accordingly, reconsideration and allowances of claims 43-46 is respectfully requested.

**Rejections under Section 103**

Claim 34

Claim 34 depends from claim 26 and is rejected over the combination of Neumann and Oracle. According to the Examiner, Oracle supplies forward-mapping and reverse-mapping of objects. See, Office Action at page 11. Oracle simply describes the capabilities of a software development product. It does not cure Neumann’s deficiencies related

to the local data store and uploading aspects of the claimed invention as these are discussed in connection with claim 26. Accordingly, this combination of references fails to teach or suggest each and every claim element. Reconsideration and allowance of claim 34 is therefore respectfully requested.

**Examiner's Response in Paragraph 28 of the Office Action**

Though the foregoing claim amendments have mooted the issue raised in paragraph 28 of the Office action, the following is presented to clarify the record.

As an initial matter, the foregoing claim amendments were not motivated by the statements made in paragraph 28 of the Office action, but rather by the goal to more clearly distinguish over the art of record.

As to the matter at hand, the examiner stated that a confirmation was made by the undersigned that “there is no literal support in the specification for disclosure of ‘previous.’” *Office action at page 11.* Respectfully, this is somewhat of an overstatement and is not entirely correct.

A search of the section of the specification entitled “DETAILED DESCRIPTION” does not reveal the use of the word “previous.” The claims as originally filed, however, recited “at least one previous rendering request” and other limitations including the term “previous.” To the extent that the claims constitute a part of the specification per MPEP Section 608.01(a), there is in fact literal support for the term “previous” and phrases using the term “previous.”

The examiner also stated that “[t]he term is indefinite because the specification does not clearly redefine the term,” presumably referring to the phrases appearing in the originally filed claims which include the term “previous.” *Office action at page 12.* Throughout the specification there is discussion of a “rendering request” and that rendering requests may be received from a client site at different times. (See e.g., Specification at page 10: “Advantageously, bandwidth between the client site and the rendering service is conserved when many related rendering requests are submitted, such as when a user makes minor tweaks and modifications to one or more rendering requests between sessions.”) As just one example, the

Examiner's attention is directed to the project resource pool which caches rendering resources and clearly facilitates servicing successive rendering requests from a client site. (See e.g., Specification at page 22: "The project resource pool mirrors the remote site project storage device 314 and serves as a cache of resources to be shared by all session storage nodes.")

Thus, while the term "previous" is not *literally* present in the "DETAILED DESCRIPTION," this terminology is clearly supported and is used in such a way that one of ordinary skill would understand what is meant by "a previous rendering request." Respectfully, the examiner's assessment that the term is indefinite is incorrect.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

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